



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/675,185	09/30/2003	Merle L Keller	400.0005.U1(US)	5674

34070 7590 12/19/2006  
K.P. CORRELL AND ASSOCIATES, L.L.P.  
270 BELLEVUE AVE., #326  
NEWPORT, RI 02840

EXAMINER
----------

TRAN, KHAI

ART UNIT	PAPER NUMBER
----------	--------------

2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/19/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/675,185

Applicant(s)

KELLER ET AL.

Examiner

KHAI TRAN

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6,7 and 13-23 is/are rejected.
- 7) ☒ Claim(s) 3-5,8-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The disclosure is objected to because of the following informalities

On page 18, line 18, the term "a MAND composite code" is disclosed in the specification. However, there is no indication as to what MAND stands for.

On page 19, line 2, the term "a MAJ combined codes" is disclosed in the specification. However, there is no indication as to what MAJ stands for.

Appropriate correction is required.

### ***Claim Objections***

2. Claims 6-7, 10-11 are objected to because of the following informalities:

Claims 6-7, 10-11, the terms "MAND" and "MAJ" should be spelled out.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. Claims 13-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 13, the last limitation as "a Normalized Epoch .... Least one NEAP" is not clear to what relationship with a first limitation of the claim. There is no connection between the first limitation and the second limitation. The NEAP generator generates at least one NEAP, it is not clear what is the at least one NEAP, is it a NEAP code ?.

Claims 14-21 are rejected by virtue of their dependency.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 6, 7, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Subramanian (U.S. Pat. 5,361,276) in view of Burns (U.S. Pat. 6,611,512).

Regarding claim 1, Subramanian discloses a receiver for acquiring composite pseudo-noise (PN) encoded signals, the receiver comprising: a receiver demodulator (103); a first receiver clock generator (see col. 9, lines 58-68); at least three first receiver pseudo-noise (PN) component code generator coupled to first receiver clock generator (Rake receivers 108 as shown in Fig. 1, coupled to PN code generators 122 for tracking respective code to within a fraction of a chip, col. 5, lines 54-61); a receiver logic combiner (110) coupled to the at least three first receiver PN component code generators, the receiver logic combiner adapted to generate a local epoch symmetrical composite PN code. Subramanian fails to disclose wherein the local epoch symmetrical composite PN code comprises at least three PN component codes, wherein the at least three PN component codes are relatively prime.

Burns discloses wherein the local epoch symmetrical composite PN code comprises at least three PN component codes, wherein the at least three PN component codes are relatively prime (col. 4, lines 47-65). The motivation would have been obvious to one having ordinary skill in the art at the time the invention was made

Art Unit: 2611

to utilize the local epoch symmetrical composite PN code comprising at least three PN component codes (pilot epoch) as taught by Burns into the teachings of Subramanian in order to locate the pilot signal.

Regarding claim 2, Subramanian discloses that the at least three first receiver pseudo-noise (PN) component code generators comprises four receiver PN component code generators (Fig. 1).

Regarding claims 6-7, Subramanian discloses wherein the receiver logic combiner comprises a MAND logic combiner or a MAJ logic combiner (col. 5, line 62 to col. 6, line 7).

Claim 13 is similar to claim 1. Therefore, claim 13 is rejected under a similar rationale.

### ***Double Patenting***

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir.

Art Unit: 2611

1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claims 1, 2, 8, 9, 13, 14, 15, 22, 23 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 3, 12, 20, 27, 28, 29, 30 of copending Application No. 10/242,146 (amendment filed 11/13/2006), hereinafter as '146. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 2, 3, 6, 12, 20, 27, 28, 29, 30 of '146 encompass the scope of the claims 1, 2, 8, 9, 13, 14, 15, 22, 23 of the instant application. Omission of element and its function in combination is obvious expedient if remaining elements performs same function as before. *In re KARLSON* (CCPA) 136 USPQ 184 (1963).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Allowable Subject Matter***

8. Claims 3, 4, 5, 8-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 16-21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Conclusion***

Keller et al (U.S. Pat. 7,065,127) disclose a system for generating (PN) spread signals.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KHAH TRAN whose telephone number is (571) 272-3019. The examiner can normally be reached on 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Application/Control Number: 10/675,185

Page 7

Art Unit: 2611

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



KHAI TRAN  
Primary Examiner  
Art Unit 2611

**KT**

**December 15, 2006**